

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-86 (canceled).

Claim 87. (currently amended) A method of making aluminum oxynitride, the method comprising:

(a) providing a chamber;

(b) introducing aluminum oxide particles and carbon particles into the provided chamber;

(c) reacting the aluminum oxide particles and carbon particles introduced into the provided chamber with nitrogen, comprising:

mixing the aluminum oxide particles and carbon particles within the provided chamber;

passing nitrogen gas over the mixing aluminum oxide particles and carbon particles with the mixing aluminum oxide particles and carbon particles being at a temperature sufficient to convert the aluminum oxide particles, carbon particles and nitrogen into the aluminum oxynitride during the conversion of the aluminum oxide particles, carbon particles and nitrogen into the aluminum oxynitride; and

(d) removing the aluminum oxynitride from the chamber;

wherein the mixing comprises rotating the chamber;
further comprising:

forming the aluminum oxynitride into a transparent structure;

wherein forming the aluminum oxynitride comprises:

forming a green body comprising the aluminum oxynitride; and
sintering the green body,

| ~~The method of claim 86,~~ further comprising: isostatically pressing the sintered
green body under heat.

Claims 88-93 (Canceled)